

REMARKS/ARGUMENTS

In response to the Office Action dated November 20, 2009, reconsideration is respectfully requested.

Discussion of rejections under 35 U.S.C. §112

Claims 36 and 43 stand rejected under 35 U.S.C. §112, first paragraph. Claims 36 and 43 have been canceled without prejudice, rendering these rejections moot.

Discussion of rejections under 35 U.S.C. §103

Claims 1, 5, 7-18, 20, 22-23, 30-32, 34-37, and 42-43

Claims 1, 5, 7-18, 20, 22-23, 30-32, 34-37, and 42-43 stand rejected under 35 U.S.C. §103(a) over U.S. Patent No. 6,385,458 (Papadimitriou) in view of U.S. Patent Application Publication No. 2004/0203900 A1 (Cedervall) in view of US 2003/0035544 (Herle). Claims 18, 20, 22-23, 31-32, 34-37, and 42-43 have been canceled without prejudice, rendering these rejections moot.

Claims 1, 5, 7-17, and 30

Claim 1 recites a method of providing location services (LCS). The method includes, in part, (1) performing authorization to determine whether a location client is authorized to receive location information for a mobile station via a first network entity, (2) performing authentication to authenticate the location client, (3) performing authorization to determine whether a second network entity is authorized for the location information, (4) performing authentication to authenticate a second network entity, (5) performing location determination to obtain the location information when the suitable location information is unavailable, and (6) performing location distribution via the first and second network entities.

The Examiner cited ¶¶ [0008], [0036], and [0038] of Herle as disclosing authorization and authentication features of claim 1 as recited before the present amendments. Herle discusses performing authentication for providing location information only, and does not teach or suggest

that authentication is or should be used for location determination. Conversely, claim 1 recites performing authorization to determine whether a location client that requested a mobile station's location is authorized to receive this information, performing authentication to authenticate the location client, performing authorization for location determination to determine whether a second network entity is authorized for the location information, and performing authentication for location determination. Neither Papadimitriou nor Cedervall make up for these deficiencies of Herle, and a skilled artisan would not obviously conclude to implement the method of claim 1 without the improper hindsight of claim 1 itself.

For at least these reasons, independent **claim 1** is, and **claims 5 and 7-17** that depend from claim 1 are, patentable over Papadimitriou in view of Cedervall in view of Herle.

Independent **claim 30** has been amended to recite a computer program product comprising instructions configured to cause a processor to authenticate, based on a first security procedure, a location client requesting location information of a mobile station, and to authenticate the mobile station for location determination based on a second security procedure, independent of the first security procedure. Herle does not teach or suggest authentication of a location client requesting location information of a mobile station and authentication of the mobile station for location determination. Neither Papadimitriou nor Cedervall make up for these deficiencies of Herle, and a skilled artisan would not obviously conclude to implement the computer program product of claim 30 without the improper hindsight of claim 30 itself. Thus, for at least these reasons, independent claim 30 is patentable over Papadimitriou in view of Cedervall in view of Herle.

Claims 3, 4, 20, 24-26, 28-29, and 37

Claims 3, 4, 20, and 37 stand rejected under 35 U.S.C. §103(a) over Papadimitriou in view of Cedervall in view of Herle in view of U.S. Patent No. 6,064,471 (Horn). Claims 20, 24-26, 28, and 37 have been canceled without prejudice, rendering these rejections moot. Claims 3 and 4 depend from claim 1 and are therefore patentable for at least the reasons discussed above.

Independent **claim 29** recites an apparatus comprising means to obtain a first session key used for authentication between a first network entity and a mobile station, means for performing location determination using the first session key to obtain location information for the mobile

station, means to obtain a second session key used for authentication between a second network entity and a location client, and means to provide the location information for the mobile station to the location client. As discussed above, Herle does not teach or suggest at least authentication for location determination. Neither Papadimitriou nor Cedervall nor Horn make up for these deficiencies of Herle, and a skilled artisan would not obviously conclude to implement the apparatus of claim 29 without the improper hindsight of claim 29 itself.

Claims 28 and 33

Claims 28 and 33 stand rejected under 35 U.S.C. §103(a) over Papadimitriou in view of Cedervall in view of Herle in view of U.S. Patent Application Publication No. 2003/0125044 (Deloach). Claims 28 and 33 have been canceled without prejudice, rendering these rejections moot.

Claims 38-40

Claims 38-40 stand rejected under 35 U.S.C. §103(a) over Papadimitriou in view of Cedervall in view of Herle in view of U.S. Patent Application Publication No. 2003/0119481 (Haverinen). Claims 38-40 have been canceled without prejudice, rendering these rejections moot.

Claim 44

Claim 44 stands rejected under 35 U.S.C. §103(a) over Cedervall in view of Herle. Claims 28 and 33 have been canceled without prejudice, rendering these rejections moot. Similar to the discussion above, claim 44 is patentable in view of Cedervall and Herle at least because Herle only discusses authentication for providing location information while claim 44 recites a method including authenticating a request from a location client for location disclosure and establishing a secure determination session between a network and a mobile station to authenticate a request for location determination of the mobile station.

Claim 45

Claim 45 stands rejected under 35 U.S.C. §103(a) over Cedervall in view of Herle in view of Horn. Horn does not make up for the deficiencies of Cedervall and Herle, and thus

claim 45, that depends from claim 44, is patentable over Cedervall in view of Herle in view of Horn for at least the reasons discussed with respect to claim 44.

Discussion of rejections under 35 U.S.C. §102

Claims 36-45

Claims 36-45 stand rejected under 35 U.S.C. §102(e) over U.S. Patent Application Publication No. 2004/0248551 (Rowitch). Claims 36-43 have been canceled without prejudice, rendering the rejection of these claims moot.

Rowitch discusses authorization of an application of a mobile station for obtaining location information, and using security procedures for location determination and disclosure. The security procedures in Rowitch are implemented between the mobile station and a network, while claim 44 recites a method including authenticating a request from a location client using a secure disclosure session between a network and the location client, and establishing a secure determination session between the network and the mobile station to authenticate a request for location determination. Thus, in claim 44, secure sessions are used between the network and the location client and between the network and the mobile station, while Rowitch discusses only security procedures between the network and the mobile station. For at least these reasons, independent claim 44 is, and claim 45 that depends from claim 44 is, patentable in view of Rowitch. Further, Rowitch is inapplicable as a reference under 35 U.S.C. §103 as Rowitch and the present application were subject to an obligation of assignment at the time the claimed invention was made.

Rowitch

The Examiner noted that Rowitch was not applied to other claims in the Office Action, but that all the independent claims except 24, 29, and 35 read on Rowitch. It is respectfully submitted that the remaining claims do not read on Rowitch.

New Claims

Claims 46-50 have been added, with claims 46-47 depending from independent claim 44, claim 48 being independent, and claims 49-50 depending from claim 48. No new matter has been added. These claims are believed to be in allowable condition.

CONCLUSION

In view of the foregoing, all claims now pending in this Application are believed to be in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

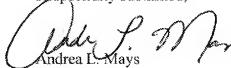
The Director of the United States Patent Office is petitioned to extend the time for reply to the Office Action dated November 20, 2009 for two months and authorizes the charge as set forth in §1.17(a) to Deposit Account No. 17-0026. It is believed that the instant response is filed within the period for response provided in the Office Action of November 20, 2009 extended by two months as provided for under 37 CFR 1.136.

If a fee is required for an extension of time under 37 CFR 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account. In the event that additional fees are required or credit is due, authorization is hereby given to charge or credit Deposit Acct. No. 17-0026.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned.

Dated: April 16, 2010.

Respectfully submitted,


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